The Ohio State University Department of Statistics Advising Information for the Undergraduate Minor in Statistics

A demonstrated knowledge and working understanding of basic statistical techniques and methods is critical for students in many disciplines, including business, engineering, life sciences and social sciences. The undergraduate minor in statistics is designed as a valuable asset to enhance most undergraduate majors and career opportunities for their students.

The full requirements for the minor in statistics are available from the <u>College of Arts and Sciences</u>. This document summarizes the requirements and provides additional advising information to help students plan their studies.

To discuss or declare the minor please contact the statistics advisor, Antonio Hernandez (614-292-6961; hernandez.413@osu.edu). We strongly encourage all students interested in the minor to meet with the advisor as early as possible to plan their course of study.

Core Course Requirements

Take and pass with a grade of C- or above **all** of the following required courses:

Course	Credits	Prerequisite snapshot (see the course catalog for details)		
<u>STAT 3201</u> *	3	Calculus II		
STAT 3202*	4	STAT 3201		
STAT 3301	3	STAT 3202; or STAT 4202 and STAT 5730		
		Prerequisite or concurrent: MATH 2568‡		

^{*} The STAT 3201/2 sequence may be replaced with the STAT 4201/2 sequence (though see "Information for Major/Minor Course Overlap" on the next page). Students taking this path must also take STAT 5730 as a prerequisite to STAT 3301.

Elective Course Requirement

Take and pass with a grade of C- or above **one** of the following courses:

Course	Credits	Prerequisite snapshot (see the course catalog for details)		
STAT 3302	3	STAT 3301 and MATH 2568 (strictly enforced)		
<u>STAT 3303</u>	3	STAT 3301; or STAT 4202 and STAT 5730		
STAT 3410	3	STAT 3202; or STAT 4202 and STAT 5730		
STAT 5510	3	GE Data Analysis course		
<u>STAT 5550</u>	3	STAT 3301; or STAT 4202 and STAT 5302		

We recommend that students discuss their elective course plan with the statistics advisor as early as possible, as not all elective course options are offered every year.

^{*} MATH 2568 concurrence for STAT 3301 may be waived for students who complete supplemental educational activities prior to the start of STAT 3301. Please contact the statistics advisor for details. The MATH 2568 linear algebra prerequisite is strictly enforced for STAT 3302.

Sample Programs (Courses with math *pre*requisites beyond Calculus II are highlighted)

	Autumn	Spring		Autumn	Spring		
Sample Pr	rogram A		Sample Program B				
Year 1	3201	3202	Year 1	<mark>4201</mark>	<mark>4202</mark> , 5730		
Year 2	3301	<mark>3302</mark> , or 3303, or 5550	Year 2	3301	<mark>3302</mark> , or 3303, or 5550		
Sample Program C			Sample Pro	Sample Program D			
Year 1	3201	3202	Year 1	<mark>4201</mark>	<mark>4202</mark> , 5730		
Year 2	3301		Year 2	3301			
Year 3	3410		Year 3	3410			
Sample Program E			Sample Program F				
Year 1	3201	3202	Year 1	<mark>4201</mark>	<mark>4202</mark> , 5730		
Year 2	3301, 3410		Year 2	3301, 3410			

Information for Major/Minor Course Overlap

The minor curriculum requires 13 credit hours, 12 of which must be unique to the minor in statistics. That is, students typically cannot count courses that fulfill requirements for their major or another minor toward the minor in statistics. Typical examples are listed below.

- Mathematics and actuarial science majors have some other route for demonstrating that they have achieved the learning objectives for STAT 4201 (e.g., MATH 4530 or Actuarial Science P-exam).
 The Undergraduate Coordinator may waive STAT 4201 as a required core course in these situations. However, students in this situation must supplement their statistics minor program with approved electives to achieve at least 12 unique credits in total.
- Mathematics and actuarial science majors may be required to take STAT 4202 as a required course for their major. Students in this situation must supplement their statistics minor program with approved electives to achieve at least 12 unique credits in total.

Possible Supplemental Electives

Course		Typical Offering	Prerequisites
STAT 3302 Statistical Modeling for Discovery II**		Spring	STAT 3301 and MATH 2568
STAT 3303 Bayesian Analysis and Statistical Decision Making**		Spring	STAT 3301
STAT 3410 Principles of Data Collection and Analysis**	3	Autumn	STAT 3202; or
STAT 5410 Finiciples of Data Collection and Analysis			STAT 4202 and 5730
STAT 4620 Introduction to Statistical Learning		Autumn	STAT 3302
STAT 5510 Statistical Foundations of Survey Research**			GE Data Analysis course
STAT 5550 Introductory Time Series Analysis**	3	Spring	STAT 3301; or
STAT 5550 Introductory Time Series Analysis			STAT 4202 and 5302
STAT 5730 Introduction to R for Data Science		Spring	GE Data Analysis course
STAT 5740 Introduction to SAS Software		Autumn	STAT 3202 or 4202 or 5301
Pre-approved sections of STAT 4194	1-2		

^{**}If not already used to fulfill the minor requirements.